

# Arts Integrated Lesson Seed



**ART FORM:**  
Theatre



**SUBJECT AREA:**  
Mathematics

Lesson Title: <b>Measures of central tendency</b>	Grade: 5
Contributor, School: Margaret Brown, Dufief Elementary School	Time Frame: One class session

## State Curriculum Content Standards, Indicators, Objectives

<b>Theatre Content Standard(s)</b> 3.0 Creative Expression and Production: Students will demonstrate the ability to apply theatrical knowledge, principles, and practices to collaborative theatre presentations.	<b>Mathematics Content Standard(s)</b> 4.0 Knowledge of Statistics: Students will collect, organize, display, analyze, or interpret data to make decisions or predictions.
<b>Theatre Content Indicator(s)</b> 3.2 Demonstrate knowledge of theatre performance and production skills in formal and informal presentations.	<b>Mathematics Content Indicator(s)</b> 4.2 Describe a set of data (mean, median, mode).
<b>Theatre Content Objective(s)</b> 3.2.a Use selected posture, movement, expression and vocal skills to create characters. 3.2.b Use collaborative theatre processes to create, perform, and revise scenes and plays.	<b>Mathematics Content Objective(s)</b> 4.2.a Determine the mean of a given data set or data display. 4.2.b Apply the range and measures of central tendency to solve a problem or answer a question.

### Objective(s) (Connecting the content areas)

In this lesson the students will use the elements of theatre to portray mean, median, and mode in improvisational scenes in order to demonstrate an understanding of the characteristics of these measures of central tendency.

### Description of Lesson/Activities

The teacher reviews the characteristics and process for solving a problem involving range and measures of central tendency. Students will be assuming the characters of mean, median, and mode and brainstorm/predict language the characters of mean, median, and mode might say about themselves and about/to the others. The students work in groups of three to develop short improvised scenes and appropriate dialogue that reveal the characteristics of each in relationship to a problem or a set of data provided by the teacher. The teacher reviews the basic acting tools and skills and the students present their scenes to the class. The audience evaluates actors by means of Praise, Question, Polish (PQP).

### Assessment Strategies

- The students will be assessed by means of a simple teacher-created checklist: Did the students change their voices to fit the characters? Change their bodies to fit the characters? Collaborate and cooperate with other group members in creating the scenes? Create dialogue that fit the characters and showed its

---

relationship to the other measures? Demonstrate the characteristics of the measure? Solve the problem correctly?

- The students will assess each other using Praise, Question, Polish (PQP).